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APPROXIMATE PHYSICAL COMPOSITION OF THE PRIMARY CUTS
FROM LAMB CARCASSES OF DIFFERENT MARKET GRADES

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Of the various factors concerned in the determination of the market grade of lamb carcasses none is more significant than the proportions of fat, lean, and bone. Therefore, when it has been properly determined, grade should be a good index of physical composition. It is common knowledge that in selecting cuts of meat consumers give a great deal of attention to the proportionate amounts of fat, lean, and bone they believe to be present.

In the preparation of the accompanying table, data were available on a total of 51 lambs studied at the United States Animal Husbandry Experiment Station, Beltsville Research Center, Beltsville, Maryland. Among the lambs were 2 Columbia, 3 Corriedale, 18 Shropshire, 3 Southdale, 8 Southdown, 1 Tasmanian Merino, 2 Corriedale X Southdown, 2 Hampshire X Corriedale, 6 Hampshire X Rambouillet, 1 Southdown X Corriedale, and 5 of breeding not definitely established. For the 46 lambs on which age at time of slaughter was known the range was from 131 to 375 days. In weight of chilled, dressed carcass the range of the 51 lambs was from 13.5 to 69.0 pounds.

All carcasses were graded by a committee of 3 qualified men. Each man worked independently and for each carcass the average of the 3 opinions was accepted as the correct grade. Standards as published in Department Bulletin 1470, "Market Classes and Grades of Dressed Lamb and Mutton", were used by the members of the committee in performing the grading.

A uniform method was employed in dividing the carcasses into the 6 primary cuts. This method included, among other steps, the preparation of a 3-rib shoulder and a 9-rib "rack" or rib cut.

The values for the various components of the several cuts, as shown in the table below, are offered as a general guide and should not be considered as necessarily indicative of the exact composition of the cut in any particular instance.

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Approximate average physical composition of the primary cuts from lamb carcasses of the different market grades

Cuts and components		Grades of carcass					
		Prime	Choice	Good	Com- mercial	Utility 1/	Cull
Number of lambs		6	17	13	4	6	5
Average chilled, dressed carcass weight	pounds	50.6	43.2	34.5	31.9	21.3	16.6
Dressed carcass as analyzed							
Separable fat	percent	32.5	29.6	22.5	18.6	16.2	7.1
Separable lean	"	50.1	50.4	53.8	58.2	55.1	57.8
Edible portion	"	82.6	80.0	76.3	76.8	71.3	64.9
Bone and ligament	"	17.4	20.0	23.7	23.2	28.7	35.1
Leg (trimmed):							
Separable fat	"	20.6	18.9	13.2	12.1	10.3	4.9
Separable lean	"	65.5	65.1	68.3	71.1	67.9	69.9
Edible portion	"	86.1	84.0	81.5	83.2	78.2	74.8
Bone	"	13.9	16.0	18.5	16.8	21.8	25.2
Rib cut (9 ribs):							
Separable fat	"	38.9	35.0	24.6	19.0	17.2	3.4
Separable lean	"	43.2	45.2	50.8	55.7	50.4	55.9
Edible portion	"	82.1	80.2	75.4	74.7	67.6	59.3
Bone and ligament	"	17.9	19.8	24.6	25.3	32.4	40.7
Shoulder (3 ribs):							
Separable fat	"	27.0	24.6	20.0	16.0	15.4	8.8
Separable lean	"	57.0	56.7	58.0	63.8	58.7	60.0
Edible portion	"	84.0	81.3	78.0	79.8	74.1	68.8
Bone and ligament	"	16.0	18.7	22.0	20.2	25.9	31.2
Loin:							
Separable fat	"	37.4	33.8	26.3	20.9	18.3	5.0
Separable lean	"	51.5	52.7	57.5	62.7	61.2	67.1
Edible portion	"	88.9	86.5	83.8	83.6	79.5	72.1
Bone	"	11.1	13.5	16.2	16.4	20.5	27.9
Neck:							
Separable fat	"	26.2	21.7	14.7	13.2	9.5	1.9
Separable lean	"	45.9	46.7	50.4	56.1	50.0	53.5
Edible portion	"	72.1	68.4	65.1	69.3	59.5	55.4
Bone and ligament	"	27.9	31.6	34.9	30.7	40.5	44.6

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		Prime	Choice	Good	Com- <u>1</u> / mercial	Utility <u>1</u> / <u>1</u>	Cull
Breast:							
Separable fat	percent	34.4	33.3	27.8	22.5	16.8	6.6
Separable lean	"	42.4	40.9	41.9	47.6	47.6	47.9
Edible portion	"	76.8	74.2	69.7	70.1	64.4	54.5
Bone	"	23.2	25.8	30.3	29.9	35.6	45.5

1/ The grades Commercial and Utility were designated Medium and Common, respectively, prior to October 5, 1940. The standards for the grades were not changed.

